

**In the Claims:**

Please amend claims 1-2 and add new claims 10-16 as indicated below. This listing of claims replaces all prior versions.

1. *(Currently amended)* An electronic circuit for amplification of a bipolar current signal ~~(in)~~, the electronic circuit comprising a pair of complementary current mirrors, the current mirrors being interconnected at an input terminal and at an output terminal, wherein a first complementary current mirror of the pair of complementary current mirrors is active and a second complementary current mirror of the pair of complementary current mirrors is off when a positive current signal is applied at the input terminal and wherein the second complementary current mirror ~~of the pair of complementary current mirrors~~ is active and the first complementary current mirror is off when a negative current signal is applied at the input terminal.
2. *(Currently amended)* The electronic circuit of claim 1, wherein the first current mirror is a ~~PNP~~ NPN current mirror and the second current mirror is a ~~NPN~~ PNP current mirror.
3. *(Previously presented)* The electronic circuit of claim 1, further comprising bypass capacitors being coupled to the first and second current mirrors.
4. *(Previously presented)* The electronic circuit of claim 1, further comprising a pair of degeneration resistors for each one of the first and second current mirrors.
5. *(Previously presented)* The electronic circuit of claim 1, further comprising a feedback transistor, a control terminal of the feedback transistor being coupled to the input terminal.
6. *(Original)* The electronic circuit of claim 5, the feedback transistor being an NMOS-type transistor.

7. (*Original*) The electronic circuit of claim 5, the feedback transistor being an NPN-type transistor.

8. (*Previously presented*) The electronic circuit of claim 1, further comprising a resistor being coupled to the input terminal for providing a bipolar voltage signal input terminal.

9. (*Previously presented*) An ultrasound apparatus comprising:

an ultrasound receiver for providing an ultrasound bipolar current signal,  
a pair of complementary current mirrors, the current mirrors being interconnected at a first terminal and at a second terminal, the first terminal being coupled to the ultrasound receiver for receiving the ultrasound bipolar current signal,

wherein a first current mirror of the pair of complementary current mirrors is active during a positive swing of the ultrasound bipolar current signal while a second current mirror of the pair of complementary current mirrors is off, and wherein the second current mirror is active during a negative signal swing of the ultrasound bipolar current signal while the first current mirror is off.

10. (*New*) An electronic circuit for amplification of a bipolar current signal, the electronic circuit comprising:

a pair of complementary current mirrors, the current mirrors being interconnected at an input terminal and at an output terminal; and

bypass capacitors being coupled to the first and second current mirrors,  
wherein a first complementary current mirror of the pair of complementary current mirrors is active when a positive current signal is applied at the input terminal and wherein the second complementary current mirror of the pair of complementary current mirrors is active when a negative current signal is applied at the input terminal.

11. (*New*) The electronic circuit of claim 10, wherein the first current mirror is a NPN current mirror and the second current mirror is a PNP current mirror.

12. (*New*) The electronic circuit of claim 10, further comprising a pair of degeneration resistors for each one of the first and second current mirrors.

13. (*New*) The electronic circuit of claim 10, further comprising a feedback transistor, a control terminal of the feedback transistor being coupled to the input terminal.

14. (*New*) The electronic circuit of claim 13, the feedback transistor being an NMOS-type transistor.

15. (*New*) The electronic circuit of claim 13, the feedback transistor being an NPN-type transistor.

16. (*New*) The electronic circuit of claim 10, further comprising a resistor being coupled to the input terminal for providing a bipolar voltage signal input terminal.